Lunar Land Use

Purpose

To design a development on the Moon that is suitable, feasible, and beneficial.

Background [also see "Teacher's Guide" Pages 14, 15]

In this activity teams of students will present proposals for developments on the Moon in a competition for approval from a student-staffed Lunar Council. This activity commonly runs 8 class days.

Preparation

Review and prepare materials listed on the student sheet.

In Class

Present the scenario and divide the class into cooperative teams of 4-5 students. Each team will represent a development corporation that will make a proposal before the Lunar Council.

You will also need 3 other students to comprise this Lunar Council.

Each student will have assigned duties, as described on the reproducible "Information Sheets."

Scenario: Travel to and from the Moon has become economical. As a result, the Moon's development has become inevitable and several corporations have already approached the United Nations about the prospects of developing lunar projects. In response, the U.N. has set up a Lunar Council to consider the feasibility and suitability of each proposal.

You may want to brainstorm ideas with the class for projects on the Moon; they may include mining communities, scientific bases, telescopic outposts, government headquarters, recreational bases, tourist sites, etc. You could assign a different idea to each team.

Distribute an "Information Sheet" to each development team. Give them 3-5 days to decide what their developments will be and to design their maps, models, diagrams, etc. Not only must they present their plan before the Lunar Council, but they must convince the council of the plan's worthiness. Lobbying efforts and advertising are all part of the game as long as they are fair.

Lunar Land Use

Distribute "Information Sheets" to the Lunar Council. Their task is to organize and run a hearing regarding development on the Moon. The ultimate approval for development is in their hands.

When most of the teams have finished, let the Lunar Council set the hearing date and let the proceedings begin.

Wrap-up

Once a decision is rendered, distribute the "Wrap-up Questions" or discuss them as a class.

Extensions

1. Have the students bid for project sites or use the landing sites chosen in the "Lunar Landing Sites" activity on Page 83.

2. Hold a classroom debate on "Who owns the Moon?"

3. Have the students compare Antarctica to the Moon.

Lunar Land Use

Purpose

To design a development on the Moon that is suitable, feasible, and beneficial.

Key Words

development

feasible

beneficial

Materials

maps of the Moon

"Moon ABCs Fact Sheet"

backgound information on the Moon

"Information Sheets"

art and construction supplies

Scenario

Travel to and from the Moon has become economical; as a result, the Moon's development has become inevitable. Several corporations have already approached the United Nations with lunar proposals.

In response, the U.N. has set up a Lunar Council to look at the suitability and feasibility of each proposal.

If your team is one of the development corporations, then your job is to decide what you want to build on the Moon and where to put it, to make the maps, diagrams, and/or 3-dimensional models of your project, and to convince the Lunar Council that your project is worthy of approval.

If you are a Lunar Council member, then the development of the Moon rests on your decisions.

Procedure

1. Read the "Information Sheet" given to your group, either a development team or the Lunar Council, and divide the duties.

2. Each development team must execute a development plan and design all necessary maps, diagrams, and/or 3-dimensional models.

3. Each development team must follow the guidelines set forth by the Lunar Council.

4. Each development team must present a plan for approval.

5. The Lunar Council reviews all the plans and decides which, if any, will be accepted.

Names: _____

Date: _____

Lunar Land Use
Team Member Information Sheet

Tasks

Your team must decide what you want to build and where you want to build it. Everyone on your team should be assigned one or more of the following tasks:

Chief Engineer :   oversees the entire project, makes critical decisions, assists in the design of the project.

Lunar Geologist : studies the Lunar Sample Disk and researches the minerals that may exist on the Moon for mining and/or for use as building materials. Chooses a suitable site for the project.

Media Consultant :   oversees development of all the visual aid materials your team uses to present your proposal, such as maps, posters, and models. Also coordinates the use of slides, photographs, laser disc, etc. used to enhance your presentation.

Administrator :   keeps notes, assists media consultant, works closely with the reporter to develop the speech to be given to the Lunar Council and types this final written proposal.

Reporter :   works closely with all members to write the speech that will be given before the Lunar Council. The actual presentation may be made by any one or all team members.

Remember, you will have to "sell" your ideas before the Lunar Council. You need a well-planned project. Focus on how your project will be used, how it will benefit people, how it is environmentally friendly, etc.

Anything goes as long as it is actually possible. For example, if you are asked where the money is coming from to back your project you could say you have investors who will recover their money plus interest when the project makes money. You cannot have stories like "a limousine drove by and out popped a suitcase full of money." Have fun!

Names: _____

Date: _____

Lunar Land Use
Lunar Council Information Sheet

<div style="text-align:center">**Tasks**</div>

You are representatives of the United Nations and have been chosen to decide how the Moon will be developed. Your job is to organize and run a hearing where various teams will make proposals to you concerning the development of the Moon. Your ultimate task will be to choose one or more of the proposals brought before you. If you wish, you can choose none of the proposals or allow certain ones with restrictions or improvements.

Everyone on the Council should hold one of the following positions:

Chairperson :   runs the hearing by calling on the teams for their presentations, calls on Council members and the public to ask questions, makes critical decisions for the Council, announces the final decisions.

Timekeeper :   decides how long the presentations and the question/answer period will last, keeps track of time during the hearing, and stops teams that go overtime.

Administrator :   develops rating sheet with other members, keeps notes, writes, and sends out any bulletins to the development teams.

Names: _____

Date: _____

Lunar Land Use
Lunar Council Information Sheet
Bulletins and Ratings

Your Council should issue bulletins periodically to give guidelines and announcements to all the development teams. An example is given below:

Lunar Council Bulletin 1-1

To: All development teams
From: Lunar Council
Regarding: Hearing timeline and financial background

We have decided to allow each team 5 minutes to make their presentations following which the Council will have 10 minutes for questions and answers. Finally, the public will have another 10 minutes for questions and answers. Any variation to this policy will require permission from the Council before the hearing.

Council members also will be asking you for your sources of money. We want to be sure that if your proposal is chosen, you will be able to build it.

You also will need to develop a rating sheet to judge each team fairly. An example is given below:

Group #	Feasibility 1-10	Pollution 1-10	Income 1-10	Planning 1-10	TOTAL
1					
2					

After all the teams have made their presentations, the Council retires and renders a decision on which team, if any, will be allowed to develop.

Names: _____

Date: _____

Lunar Land Use

Wrap-up Questions

1. Did your team work together well? Why or why not?

2. Do you think it is important to have hearings like this one before the Moon is developed? Why or why not?

3. Do you think the Lunar Council's decision was fair? Why or why not?

4. Should we allow developments on the Moon? Why or why not?

5. Do you think the Moon should belong to everyone or to whomever can get there and use it first? Why?

6. How is the Moon and its development similar to the development of Antarctica?

7. What kind of environmental problems do you think we need to be aware of on the Moon?